REMARKS

The Applicants request reconsideration of this application in view of the present Amendment.

Claims 1, 6-9, and 41-50 are pending (claims 2-5 and 10-40 having been cancelled previously). Claim 1 is amended herein. Claims 41-50 are new.

35 U.S.C. § 112, Enablement

Claims 1 and 6-9 are rejected under 35 U.S.C. § 112, first paragraph, for allegedly lacking enablement. In order to further the prosecution of these claims at this time, claim 1 is amended to recite "contacting the multipotent neural stem cells with an effective amount of granulocyte-macrophage colony stimulating factor (GM-CSF) under conditions that result in production of oligodendrocytes from the multipotent neural stem cells." The Office Action indicates that the specification is "enabling for a method of producing oligodendrocytes from mammalian multipotent neural stem cells comprising: providing a cell culture of multipotent neural stem cells with an effective amount of granulocyte-macrophage colony stimulating factor under the conditions that result in production of oligodendrocytes from the multipotent neural stem cells." Office Action of 5-2-08 at p. 2. Thus, amended claim 1 is believed to be enabled and the Applicants respectfully request that this rejection be withdrawn.

Claims 6-9, which depend from claim 1, are similarly believed to be enabled and the Applicants respectfully request that the rejection of these claims also be withdrawn.

New claims 41 and 46 similarly recite "contacting the multipotent neural stem cells with an effective amount of granulocyte-macrophage colony stimulating factor (GM-CSF) under conditions that result in production of oligodendrocytes from the multipotent neural stem cells." These claims and their dependent claims (i.e., 42-45 and 47-50) are similarly believed to be enabled.

35 U.S.C. § 112, Written Description

Claims 1 and 6-9 are rejected under 35 U.S.C. § 112, first paragraph, for allegedly failing to comply with the written description requirement. Claim 1 has been amended to recite "wherein the GM-CSF is selected from the group consisting of human, canine, feline, rodent, sheep, goat, cattle, equine, swine, and non-human primate GM-CSF." The specification sets forth at page 17, lines 31-33 that "[s]pecifically included as GM-CSFs are the naturally occurring GM-CSF proteins and GM-CSFs from various species, including but not limited to, human, canine, feline, rodent, sheep, goat, cattle, equine, swine, or non-human primates." As acknowledged in the Office Action, "GM-CSF from a number of species have already been identified in the prior art." Thus, claim 1, as amended, sets forth a limited genus that is described by the specification. For these reasons amended claim 1 is believed to satisfy the written description requirement and the Applicants respectfully request that this rejection be withdrawn.

Claims 6-9, which depend from claim 1, are similarly believed to satisfy the written description requirement and the Applicants respectfully request that the rejection of these claims also be withdrawn.

New claim 41 recites "wherein the GM-CSF is at least 80% identical to human GM-CSF." A protein at least 80% identical with human GM-CSF is disclosed at page 11, lines 29-31 of the present specification. The sequence for human GM-CSF is well known (*see, e.g.*, NCBI Accession No. AAA52578 (http://www.ncbi.nlm.nih.gov/)). General knowledge in the art and the aid of a computer would have put one of skill in the art in possession of the genus of sequences that have 80% sequence identity to human GM-CSF. Thus, one of ordinary skill in the art would conclude that the Applicant was in possession of the claimed genus at the time the application was filed. For these reasons, new claim 41 and its dependent claims (i.e., 42-45) satisfy the written description requirement.

Similarly, new claim 46 recites "wherein the GM-CSF is at least 80% identical to mouse GM-CSF." A protein at least 80% identical with native mammalian GM-CSF is disclosed at

page 11, lines 21-25 and that mammals include rodents is disclosed at page 12, lines 22-24 of the present specification. Further, murine recombinant GM-CSF is used in the examples, e.g., see page 20, lines 23-24. As discussed for claim 41, general knowledge in the art and the aid of a computer would have put one of skill in the art in possession of the genus of sequences that have 80% sequence identity to human GM-CSF. Thus, one of ordinary skill in the art would conclude that the Applicant was in possession of the claimed genus at the time the application was filed. For these reasons, new claim 46 and its dependent claims (i.e., 47-50) satisfy the written description requirement.

Conclusions

For the reasons set forth above, the Applicants submit that the claims of this application are allowable. Reconsideration and withdrawal of the Examiner's rejections are hereby requested.

The Applicant believes that all the issues raised by the Examiner have been addressed. However, the absence of a reply to a specific rejection, issue, or comment does not signify agreement with or concession of that rejection, issue, or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Further, the amendment of any claim herein does not necessarily signify concession of unpatentability of the claim prior to its amendment.

In the event that a telephone conversation could expedite the prosecution of this application, the Examiner is requested to call the undersigned at 404-892-5005.

Included with this Amendment is a Petition for a two-month Extension of Time. The Extension of Time fee is being paid concurrently herewith on the Electronic Filing System (EFS) by way of Deposit Account authorization. Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: 9-17-2008

Michael R. Asam
Reg. No. 51,417

1180 Peachtree Street, N.E., 21st Floor
Atlanta, GA 30309
Telephone: (404) 892-5005
Facsimile: (404) 892-5002

12056633.doc